NATIONAL FOREST AND LAND UTILIZATION

MULTIPLE-USE LAND MANAGEMENT GUIDE

1960 - 1970

FOR

EASTERN WYOMING SUBREGION

OF

CENTRAL ROCKY MOUNTAIN AND GREAT PLAINS REGION

FOREWORD

This Subregional Plan for Multiple Use Management will serve as a guide in the development of National Forest and Land Utilization Area Block and Unit Multiple Use Land Management Plans. It was developed by a committee representing the levels of District Ranger, Forest Staff Assistant and Forest Supervisor and reviewed by the Regional Forester and his staff.

In the future lands under the administration of the Forest Service must supply more goods and services than they now do if we are to meet our objective of furnishing optimum total benefits to the public for the greatest good. This dictates that a thorough analysis and study of land management problems and opportunities be made and multiple use land management plans be developed to properly direct the management of resources and uses.

It is intended that under this guide the more specific plans will serve in particular to:

1. Direct administration in a manner to harmonize multiple resource management.
2. Provide over the long range for highest use of land for the greatest good to the total public.
3. Provide integration and implementation in managing resources and uses.
4. Provide for continuity in management direction.
5. Provide a vehicle for orientation of new administrators.
6. Obtain a better average of sound decisions by both new and old administrators.
7. Provide a base for conducting General Integrating and General Functional Inspections.
8. Provide a basis for consulting with and informing people on Forest Service management policies.

8/17/59
(Date)

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1. PLANNING PERIOD

The established planning period is about 10 years or to 1970, the estimated useful life of the plan. Review for minor revisions should be made at the end of 5 years, or about 1965. A major reanalysis should be made in 1970.

II. MANAGEMENT SITUATION

The area for which this Subregion Plan is made includes Region 2 national forest lands within Wyoming and the Land Utilization Project in eastern Wyoming; with the exception of the portion of the Black Hills National Forest within the State. Specifically, all of the Medicine Bow National Forest within Wyoming and the Wyoming Land Utilization Project.in the northeastern part of the State. All of the Bighorn National Forest and all of the Shoshone National Forest are included in this plan. The gross planning are contains the interspersed lands in other ownerships as shown on a map in the Appendix.

There are 4,978,473 acres within the exterior boundaries of national forests and 2,000,000 acres within L.U. Project, thus making a total of 6,978,473 acres within the exterior boundaries of the areas managed by the U.S. Forest Service. The net acreage of national forests is 4,609,078 and for L.U. Project 573,386; making a total net acreage of 5,182,464. Elevations range from 13,785 feet at Gannett Peak in the west to 5,000 feet at the L.U. areas. Yearly precipitation varies from over 30 inches in the mountains in the west to 10 inches on some L.U. lands on the plains. Mountain slopes generally are steep to precipitous with rock outcrops general. Mountain soils are generally thinner and less stable than the soils found in the adjoining valley and plains areas. Parent material is variable but largely of granitic, sedimentary, or volcanic origin. Soils in the valleys and plains vary from sandy loams to closely packed clays. Wind velocities are generally high and wind erosion is a problem in most areas where soil is exposed.

The upper headwaters of the Little Snake River in the southwestern part of the Subregion drain into the Gulf of California. The remainder of the streams are a part of the Missouri River System. Major streams include the Clark's Fork of the Yellowstone, Shoshone, Wind, Bighorn Powder, Tongue, Belle Fourche, and North Platte Rivers. There are many smaller streams that are tributaries of these rivers. Mr. Edward W. Munns in the June 1952 issue of the Journal of Forestry presented this interesting data:

Wyoming -(Water)

Average annual precipitation	14.1"	Statewide
" " "	18.2"	National-forest land
" " runoff	4.1"	Statewide
" " "	14.7"	National-forest land

Using Mr. Munn's figure for national-forest lands, we obtain 5,646,157 acre feet of water per year from those lands. Using his figure for lands outside national forest for L.U. lands, we obtain an additional 105,121 acre feet; and the average annual water production from national forest L.U. lands in this subregion is 5,751,278 acre feet. The mean annual stream runoff in Wyoming is about 15 million acre feet. Extensive irrigation projects have been developed in Wyoming which depend upon this water supply. When all water developments for irrigation that are now contemplated are completed, Wyoming, Statewide, will be utilizing about 27% of the water which has its origin in the State. The remainder of the water originating in Wyoming is used in other States for irrigation, industrial, municipal, and other uses. The right of States to the waters of the interstate streams are settled by decrees of the United States Supreme Court or by interstate compacts. Recreation use of water in Wyoming is increasing at an extremely rapid rate. This use is important to the economy of the State and for the welfare of the people. Since this use is largely a nonconsumptive type of use the large increase happily has a relatively small impact on water problems.

The State of Wyoming is sparsely inhabited, having a total population of 290,529 at the time of the 1950 census. The State at that time had a population density of 3.0 per square mile and ranked 48 in the United States in this respect. The estimated population in 1958 was 320,000 which represents about a 10 percent increase in the past 8 years. The population is largely rural and small town in nature. There are no large cities. Laramie County in 1950 had the largest population of any County in the State, a total of 47,662. The distribution of population in Wyoming has been closely related to crop production particularly in irrigation areas. Exceptions occur where the oil and mining industries have been active and along the Union Pacific Railroad. The influence of industry will be the determining factor in future population shifts and totals in Wyoming. The Wyoming Subregion includes approximately 66 percent of the area and 80 percent of the population of the State of Wyoming.

Increase in population will have obvious impacts on national-forest lands. Likewise the build-up of populations adjacent to the subregion, as in eastern Colorado, directly affects the Eastern Wyoming subregion. Increased recreational use in Wyoming by out of State people is a good example.

It seems inevitable that there will be a considerable amount of industrial expansion in the State of Wyoming during the next ten years. Examples of recent developments include the Columbia-Geneva Steel operation near Lander, uranium mining and milling near Jeffrey City, and the missile base at Cheyenne. As industry becomes more important in the State, the influence of agriculture in State affairs will tend to diminish. To a large degree the people brought into the State by industrial expansion will be unfamiliar with the resources and land management problems of the area. This indicates direction for information and education effort which must be taken into account in planning at all levels.

The Subregion contains 60% of the national forest timber resources in the State of Wyoming. The area of commercial forest lands is 1,642,000 acres. This is 65% of the total national forest commercial forest lands in the State. The annual allowable cut is 80 million feet board measure and this represents 53% for all national forest lands in the State. The actual annual cut averages 50 million feet--this is 62% of the total cut from all national forest land in the State. Although the actual annual cut has been increased better than 50% during the past 10 years, there has never been sufficient industry within the area to harvest the regulated cut. The present sawmill production must be doubled in order to meet an allowable cut of 80 million feet. In addition, an industry using subsawtimber size material should be established in order to put the lodgepole pine types in good growing condition. Timber access roads are urgently needed in order to increase the cut.

The lodgepole pine sawtimber types are overmatured and heavily infested with dwarf mistletoe and stem canker. Most of the young lodgepole stands regenerated on cutover areas are also heavily infested with dwarf mistletoe. The spruce-fir sawtimber types are also overmatured. The ponderosa pine types have been pretty well cut over. The natural regeneration in this type ranges from medium to poor stocking.

To put the commercial forest lands in good growing condition there is considerable timber stand improvement and reforestation work to be done in addition to the harvesting of the overmatured stands. It is estimated that there are some 25,000 acres of non-stocked lands and close to

100,000 acres of old burns that are in need of reforestation. Approximately 500,000 acres of lodgepole pine type are in need of timber stand improvement such as thinnings.

Recreation on national forests in the subregion totaled more than 1 million mandays in 1957. (Exclusive of highway use.) This is 10% of the total recreation use in Region 2. Areas adjacent to the larger population centers receive a heavy recreation pressure as a major portion of this population depends on national forest areas for recreational opportunities. Recreational use, local and out of State, is expanding rapidly in the subregion. From 1946 through 1957 there was 173% increase in recreational use. In the years 1946 through 1957 the number of visitors to Yellowstone National Park increased 96%. This increased use of Yellowstone National Park has a direct influence on national forest visitors. Recreation pressure will continue to increase rapidly as the population here and in the nation continues to increase, and as all forms of outdoor recreation grow in popularity.

Wildlife in the subregion attracts over 20% of the big game hunting and 10% of the fishing in Region 2. Estimates of big game animals on N.F. are 40,000 mule deer, 200 white tail deer, 15,000 elk, 2,000 antelope, 1,000 black bear, 70 grizzly bear, 2,000 Bighorn sheep, and 600 moose. The L.U. Project has an estimated big game population of 18,000 antelope, 300 white tail deer and 2,100 mule deer. There are 2,700 miles of fishing streams and 13,300 surface acres of fishing lakes. The percentage of out of State hunters and fishermen is high and indications are that it will continue to increase. Close and effective working relations with the State Game and Fish Department, Fish and Wildlife Service, BLM, and sportsman organizations are essential to proper game management. In some areas access is an important factor in proper wildlife harvest, Winter range is a limiting factor in big game carrying capacity.

National forests and the L.U. Project in the subregion graze approximately 71,800 head of cattle and 200,700 head of sheep. The national forests furnish 173,000 cow months and 328,000 sheep months of grazing by 1957 actual use records. This grazing use is 18% and 23% respectively of the use permitted in Region 2 forests. The L.U. Project furnishes approximately 110,000 cow months and 26,000 sheep months grazing. Many Wyoming ranchers are dependent upon national forest range for the summer range necessary to provide a balanced year-long operation. Ranches using the L.U. lands are dependent upon this forage to round out their year long operations. Although range adjustments have been made on a number of range allotments in many areas the range is in poor condition.

Principal mining and oil activity within the subregion is occurring outside of the national forests. Extensive oil and gas exploration and development is taking place on the L.U. Project. A vast increase in all phases of mineral and oil exploration and development can be expected throughout the subregion. It contains large known reserves of coal, oil shales, and uranium and iron ores. The established oil and gas industry with its related operations is rapidly expanding. Exploration and early development work in several areas is pointing to large industrial establishments in steel and aluminum. These new industries can be expected soon.

The subregion is crossed by three major north-south highways and four major east-west highways. A network of interconnecting secondary highways and minor roads provides good access to the N.F. Additional transportation developments, particularly Forest Highways, Forest Development Roads, and Trails are urgently needed for full resource development of the subregion. Three of the major highways within the subregion have been designated as parts of the U.S. Interstate Highway System. These are east-west highways U.S. 14 in the north and U.S. 30 in the south and north-south highway U.S. 87. Completion of the Interstate routes within the subregion will contribute greatly to the increasing use and development of resources within it. There is need for careful consideration of the impact of the interstate routes on all resource plans. Rail transportation is provided within the subregion by three railroads. They are the Union Pacific, an east-west railroad, which crosses the southern part of the subregion; the Chicago and Northwestern, also an east-west route, crossing through the central part of the subregion to Lander, Wyoming, which is the western terminus of this railroad; and the Chicago, Burlington and Quincy which traverses the subregion on two north-south routes. Air transportation within the subregion is provided by three commercial airlines maintaining dependable service to the principal towns. Contract air service is available. Air transportation is becoming in increasingly important and dependable means of travel throughout the subregion.

III. GENERAL MANAGEMENT DIRECTION

Set forth in this section are management directions, by resources and uses, that are common to all management zones in the subregion. (Management Zones are explained in the next chapter.) This is done to avoid repeating these directions in each zone. Thus the management direction set forth later for each zone applies to that zone and no other.

In the management of any resource or use, it is necessary that:

(1) Soil be considered the basic resource with which we are dealing and that it is the medium supporting or influencing other resources. This will be an overriding consideration.

(2) Close working relationships will be maintained with agencies, organizations or individuals concerned with the management and protection of that particular resource or use. Examples are: cooperation with health departments is essential in developing public use areas and with game and fish departments in the management of game an and fish.

(3) As research findings become available, resource management will be adjusted and developed to make use of the data.

SOIL

MANAGEMENT WILL BE GEARED TO KEEP SOIL IN PLACE AND IMPROVE ITS GENERAL PRODUCTIVE QUALITIES FOR WATER AND VEGETATION.

1. Management practices that will improve soil conditions will be given preference.

2. Uses that accelerate erosion will be avoided, except where adequate preventive or corrective measures can be specified and will be applied.

3. Accelerated erosion will be controlled where unacceptable damage is occurring.

4. Close working relationships will be maintained with agencies, organizations, and individuals concerned with classification, mapping, management and protection of soil, both inside and outside the national forests.

5. Soil types, soil characteristics and effect of permissible soil uses will be evaluated by soil technicians. This information will be furnished resource managers for application in management.

WATER

MANAGEMENT WILL PROVIDE FOR OPTIMUM YIELD AND DELIVERIES OF USABLE WATER IN STABLE STREAM FLOW OR SUBSURFACE SUPPLY

1. Management practices that will increase yield of usable water will be given preference to the extent compatible with multiple-use needs and values.

2. Any agreements negotiated or permits issued for development, diversion or storage of water on national-forest land will provide for protection of other uses of land or water in accordance with a full evaluation.

3. Initiate water projects or assist in their development by others for on-site use when consistent with State law and when the public will benefit through increased use of national-forest resources.

4. Coordinate and cooperate closely with other agencies in the development of water supply and in the control of water contamination and pollution.

5. Assume active leadership in the watershed management field in order to more effectively meet our responsibilities in this field.

6. Consider manipulation of water pointed toward regulation of flows, portection of channels and on-site use for protection and development of soil.

TRANSPORTATION

A GREATLY INCREASED CONSTRUCTION PROGRAM OF HIGHWAYS, ROADS, AND TRAILS IS ESSENTIAL TO ORDERLY DEVELOPMENT OF THE AREA TO REALIZE PROPER VALUES OF ALL RESOURCES, ESPECIALLY TIMBER AND RECREATION.

1. Location of highways, roads, Jeep ways, and trails will be made with a view of giving maximum preservation to natural conditions and capitalizing on potential as well as existing forest values.

2. Construction projects will provide for soil stabilization through revegetation and other means as promptly as practicable, including obliteration of all abandoned roads and improvements.

3. Maintenance of transportation routes will be conducted in a manner that will insure soil stabilization.

4. Take advantage of all opportunities including timber sale negotiations to obtain permanent rights-of-way on the entire transportation system. Give priority to areas denied public access by alienated land tracts.

5. Locate highways, roads, Jeep ways, and trails to avoid stream channel disturbance. If not possible, fish habitat will be developed in relocated stream channels to fullest extent possible.

6. In locating and developing air transportation facilities, impact on all forest resources will be considered.

FIRE CONTROL

FIRE PLANNING SHOULD BE KEPT CURRENT TO PROVIDE GUIDANCE FOR MODERNIZATION OF FIRE CONTROL PROCEDURES IN KEEPING WITH DYNAMIC LAND MANAGEMENT PROGRAMS.

1. Emphasize analysis of the fire problem with particular attention to: prevention, fuel treatment, increasing hazard and risk, State and private land problems, cooperative relationships with other land management agencies and military installations.

2. Recognize prescribed burning as a tool of resource management Take advantage of good resource management opportunities to reduce the fire hazard and facilitate the control of fires that occur.

LANDS

MANAGEMENT DIRECTION WILL BE TO IMPROVE OWNERSHIP PATTERN FOR ADMINISTERING LANDS CONSISTENT WITH PROPER USE ON A COORDINATED BASIS.

1. Boundary adjustment and land exchange will be used to improve ownership pattern with emphasis in acquiring lands with high multiple-use value and disposing of lands better suited to private ownership.

2. Acquire key areas for administrative use, rights-of-way and other uses that will promote N.F. resource use and development.

3. National-forest lands, bordering streams, and lakes, which provide valuable public access will not as a rule be exchanged.

4. Particular consideration shall be given to securing rights-of-way to provide public access to N.F. land.

5. Lands with extraordinary public resource or administrative value will be given protection through the use of appropriate laws and regulations.

6. In connection with planned Federal reservoir projects (inside the forests) make concerted effort to have private land needed for public use, health, and property protection, acquired and placed under National Forest Administration.

SPECIAL LAND USES

DIRECT MANAGEMENT TOWARD LIMITING SPECIAL USES TO THOSE OF PUBLIC VALUE OR THOSE WHICH ARE IN THE INTEREST OF LOGICAL AND PRACTICAL LAND MANAGEMENT.

1. Encourage occupancy type of recreation on private land when available.

2. Uses not compatible with management priorities and objectives will be placed on suitable tenure and eventually eliminated.

3. Roads and trails constructed by permittees should be to extent possible, correlated with F.S. transportation system.

MINERALS

WILL GIVE FULL RECOGNITION TO LEGITIMATE MINERAL ACTIVITY AND ACTIVELY PROTECT ABUSES OF THE MINING LAWS.

1. Legitimate mineral activity will be recognized as a form of resource use. Such activity may be harmonized with other objectives of administration through cooperation with the miner and prospector.

2. Mining activity which exceeds normal operations and results in damage to national-forest land will be subject to injunction until the validity of the claim is determined.

3. A determination of surface rights will be made on all areas where locations now or likely will, interfere with National Forest Administration.

4. Stipulations in gas and oil leases will provide for protection of national forest and L.U. interests. As a followup, close cooperative working relations will be maintained with lease holders.

RECREATION

DIRECT MANAGEMENT TOWARD ADEQUATELY PROVIDING FOR THE VARICUS CLASSES OR FORMS OF RECREATION TO MEET THE DEMANDS TO THE EXTENT SUCH IS IN THE BEST INTEREST OF THE PUBLIC.

1. Recreation developments will be in accordance with approved plans.

2. Priorities in recreation development and uses will be assigned to favor the highest form of recreation use.

3. Recreation occupancy uses will be limited to the travel and water influence zones.

4. Encourage commercial, occupancy, and single purpose type recreation developments on private land when possible, and compatible with desirable land management practices.

5. Recreation potential on all water impoundments will be studied and development plans prepared where needed - prior to construction.

6. Protect recreation areas through use of appropriate laws, regulations and executive orders.

TIMBER (See Intermediate Zone)

Management of commercial timber stands is generally confined to the Intermediate Zones and specific direction is included under the Zone's direction. Timber Management in other zones is handled in a specified manner as outlined under each zones' direction.

RANGE

LAND SUITED TO LIVESTOCK GRAZING WILL BE MANAGED FOR THAT PURPOSE.

1. Bring usable to optimum forage production.

2. Limit livestock use to usable range.

3. Adjust stocking to carrying capacity.

4. Provide needed range improvements as rapidly as possible.

5. Grazing should be managed to protect and improve fish habitat.

WILDLIFE

WILDLIFE HABITAT WILL BE MANAGED TO PROVIDE OPTIMUM FOOD COVER AND WATER FOR GAME AND FISH. MANAGE GAME AND FISH ON A SUSTAINED BASIS.

1. Provide and initiate a program aimed at securing basic wildlife habitat facts and providing for full administration and development of wildlife habitat areas.

2. Take initiative in planning and execution of fish and wildlife habitat improvement programs.

3. When practicable, provide public fishing on water impoundments.

4. Provide proper public access to public fishing waters and big game range, through land exchanges, exchange of use agreements and road and trail programs.

5. Keep harvest of big game in balance with habitat.

Suggested Revisions in General Management Directions

IV Management Zones

Zoning is used as a device in this guide for isolating or separating areas in the subregion for which management consideration, as regards priorities, objectives and direction should be different. A management zone may be defined as an area within which a controlling resource or use (sometimes more than one) can be isolated for inventory and analysis, for which specific controls may be set forth.

The management zones used in this subregion are: Crest, Intermediate, Low, Travel Influence and Water Influence. Each zone is described and illustrated by a photograph. For each zone, management priorities, objectives, and directions are set forth. The management directions listed for each zone are directions which apply specifically to the zone. It should be remembered that the management directions in Chapter III are common to all management zones.

Special Areas Considered in this category are special areas such as wilderness areas, wild areas, geological areas, natural areas, scenic areas, etc. Each area will be considered on a special area basis and management will be set forth specifically for each area.

Representative Illustrations

of

Crest Zone

CREST ZONE

The Crest Zone is the highest zone in this area. The altitudinal range varies from 9,000 to almost 14,000 feet. This zone is generally represented throughout the subregion. It includes the alpine and subalpine types down to the upper limits of the Intermediate Zone.

Water yield per acre is greatest in this zone. The production of water is estimated to be an average of $2\frac{1}{2}$ acre feet per acre annually.

The area is important summer range for big game animals and furnishes some range for domestic animals. Shallow soils and short growing seasons limit the period of use, and dictate a policy of caution in the management of this zone.

The zone has a cool climate and contains much spectacular scenery, including extensive glaciers. Mountain climbing, pack trips, hunting, photography, and fishing in the particularly numerous high altitude lakes provide the chief forms of recreation in this zone. Major recreation developments are not present within the crest zone. The extensive recreation use is chiefly of the Wilderness types.

MANAGEMENT PRIORITY

Water - primary
Recreation - secondary

MANAGEMENT OBJECTIVES

1. To provide for production and delivery of the optimum yield of usable water in a regulated flow.

2. To develop the recreation potential of this area to insure the maximum contribution to the welfare and enjoyment of all the people.

3. To establish and use sound grazing capacities and management for wildlife and domestic stock.

MANAGEMENT DIRECTION

Water

1. The critical soil-water relationships in the Crest Zone require a policy of extreme caution in use which might cause soil disturbance.

2. An accelerated, correlated research program is needed and should be given high priority to determine soil-water relationships.

Recreation

1. Public recreation developments will meet prescribed high mountain type standards guided by public safety and comfort.

2. Occupancy and use will be carefully regulated so as to protect and maintain soil and water values in this critical zone.

Timber

1. Any cutting of timber will be limited to that necessary to protect and enhance recreational values, including that necessary for insect and disease control.

Range

1. Usable range, as determined by the Range analysis, should be used conservatively. Discontinue use on range classed as unusable.

2. The need for forage for recreation pack and saddle stock will be recognized when permitting grazing in this zone.

3. Range research correlated with other research should be given high priority.

Wildlife

1. Give high priority to habitat needs of wildlife.

2. Take initiative in planning and execution of game and fish habitat improvement programs.

Special Land Uses

Occupancy will be limited to that required for resource management or are peculiar to crest area needs for electronics research needs, transportation, etc.

Transportation

Approved "jeep-ways" will be designated on those areas especially subject to cross-country vehicular damage. Every effort will be made to channel such travel over approved routes.

Representative Illustrations

of

Intermediate Zone

INTERMEDIATE ZONE

The Intermediate Zone extends from the lower limits of the major commercial timber stands, which may be lodgepole pine, Douglas fir and ponderosa pine, or a mixture of the species, through the lodgepole pine type to the upper limits of the commercial spruce-fir timber type which is the lower limits of the Crest Zone. It contains nearly all of the commercial timber lands of the subregion.

Annual precipitation varies from about 15 inches to 25 inches. Although the Crest Zone yields more water per acre, the Intermediate Zone, because of its size, produces the highest total yield.

Most national forest grazing range in the subregion is in this zone. Forage is found in open timber stands, in scattered parks, and in stringers along the streams. This zone provides much of the summer range for big game animals. Lower elevations of the zone provide both summer and winter game range. Most of the fishing streams and some lakes are in this zone.

Hunting, fishing, camping, picnicking and riding are principal forms of recreation. However, concentrated recreation use and facilities (including summer homes) are mainly within the Occupancy Zones.

MANAGEMENT PRIORITY

Water and Timber - primary.
Wildlife and Range - secondary.

MANAGEMENT DIRECTION

Timber

1. Complete the revision of all working circle plans by the end of FY 1962.

2. Meet allowable cut for all working circles by 1965.

3. Timber management plans and timber sale contracts will provide for adequate protection of soil and water values.

4. Maintain a desirable stocking of lodgepole pine stands by commercial and non-commercial thinnings.

5. Regenerate non-stocked and under-stocked commercial forest lands. At least one-half of the job should be accomplished during this ten-year period.

6. Reduce disease and insects to, and maintain at, not to exceed endemic levels.

7. Prevent damage to fishing streams.

8. Keep debris out of fishing streams.

9. Keep log lands back from streams to avoid damage to streams and riparian vegetation.

10. Cutting immediately adjacent to streams supporting fish will be limited to diseased trees, human hazard trees, and salvage cutting.

Range

1. Bring all usable range, as determined by range analysis, to maximum production through sound range management practices and physical improvements.

2. When type conversion projects are undertaken, measures will be taken to protect other resource values i.e. riparian vegetation along streams, important wildlife forage species, and aesthetic values around edges of parks (aspen, etc.).

Wildlife

1. Preserve a reasonable portion of the forage crop to meet needs of desirable wildlife population.

2. To the extent possible, regulate and coordinate other activities and uses so that streams, lakes, and reservoirs retain their highest potential for fish habitat.

Representative Illustrations

of

Low Zone

LOW ZONE

The low zone is a transition area between the plains and the mountains. It typically lies along the base of the mountains below the commercial timber stands. Topography varies from gently rolling country to precipitous and steep. Deep canyons are common. The soils in the zone vary within the subregion but, for the most part, are highly erosive.

Vegetative types consist of grassland and brush areas with scattered stands of timber. Usually the timber stands are of such poor form and low volumes per acre as to be considered unmerchantable but there are some areas containing timber types.

Annual precipitation is generally below 15 inches. Water production per acre is comparatively low.

The zone furnishes important winter big game range over most of the subregion. Livestock grazing is also an important use in this zone. Recreation use is comparatively minor in nature, although in localized areas it may be of major importance.

Because of the topography, generally light vegetation cover, highly erosive soils, and the common prevalence of very high intensity summer rainstorms, the zone is extremely vulnerable to soil movement. For this reason careful consideration must be given in managing this zone to its sensitiveness to all resource use.

MANAGEMENT PRIORITY

Wildlife and Range - Primary

MANAGEMENT OBJECTIVES

Establish and use sound grazing capacities and management practices for wildlife and livestock - - recognizing the need for giving protection to important (key) winter game ranges.

MANAGEMENT DIRECTION

Wildlife

1. Reserve critically needed big game winter range for this purpose in cooperation with the State Game and Fish Department and other land management agencies on a coordinated basis.

2. Conversion of browse to grass types will not be done in critical deer range.

Range

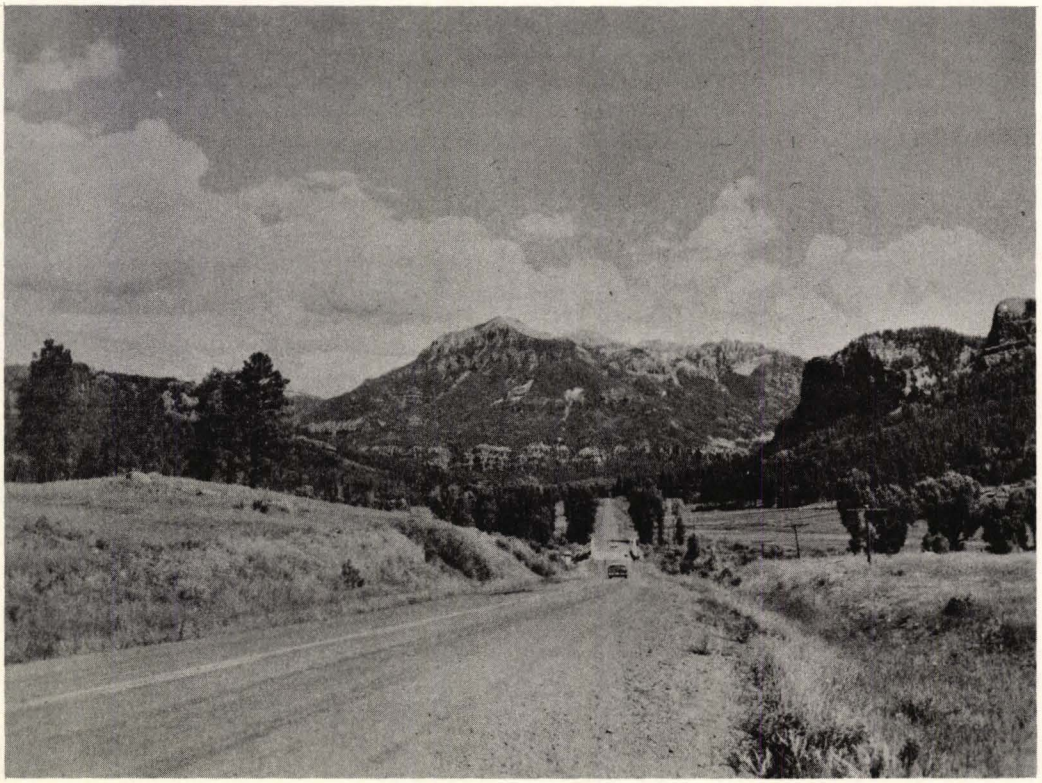
1. Limit livestock use to usable range during the proper grazing season (it is vulnerable to grazing trespass).

2. Restrict grazing of livestock on important game ranges or prohibit if need be.

Representative Illustrations

of

Travel Influence Zone



TRAVEL INFLUENCE ZONE

The Travel Influence Zone is a zone established along selected highways or other significant routes of travel to define an area of national forest land on which the present or future highest use is primarily related to the effects of accessibility resulting from travel on highways and roads. It starts at the edge of the travel route right-of-way and includes the scenic strip where such exists.

Scenic strip designation is already required along Interstate, State, and Forest Highways and may be extended to other facilities in the transportation system. Management of the scenic strip will follow roadside zone policy set forth in the Manual.

The width of this zone may vary from a few hundred feet to a mile or more depending upon the aesthetics or physical characteristics of lands adjacent to the routes of travel. It includes the areas most suited for occupancy and use such as recreation sites, resorts, organization camps and residence groups.

The key characteristic of the zone is the volume and diversity of present and potential recreation value and services. It involves unusual problems and unusual opportunities in management. It is a critical area from the standpoint of continually being under the public's eye and involves some of the most tenuous and sensitive situations in national forest management.

MANAGEMENT PRIORITY

Recreation - Primary.

MANAGEMENT OBJECTIVES

1. Be sure that the important resources of the zone are fully considered, protected and intensively developed on the basis of highest relative value to meet the demands resulting from accessibility.

2. To use this zone as a demonstration "show window" area of "Multiple-Use in Action."

3. To concentrate recreation and public service developments in this zone - providing for multiple-use to extent possible.

MANAGEMENT DIRECTION

Special Land Uses

1. All uses in connection with road and highway maintenance such as gravel pits, stockpiling, and maintenance shops will be located away from the travel route perimeter to the extent possible.

Recreation

1. Work with road and highway agencies to provide roadside rest and point of interest parking areas for traveling public.

2. Special attention will be given to preserving the natural scene such as screening occupancy uses, harmonizing architecture, and color.

3. All road locations will include consideration for optimum development of public recreation within the travel influence zone including sites for campgrounds, trailer parking, picnic areas, winter sports, etc.

Fire

1. Maximum advantage of concentrations of people will be taken to intensify our fire prevention program as well as to better inform the public of other forest programs and activities.

Range

1. Range use will be adjusted or managed to avoid conflict with recreation and other occupancy uses.

2. Key areas within the zone will be fenced to exclude livestock.

Lands

1. Priority will be given to survey and posting of interior and exterior national forest boundaries within this zone.

2. An inventory of rights-of-way needs will be made and an aggressive action program set up to obtain those needed.

Timber

1. Timber will be harvested in such a manner and to a degree that will be compatible with and will enhance recreation values and "show windows" along our roads.

Representative Illustrations

of

Water Influence Zone

WATER INFLUENCE ZONE

The Water Influence Zone constitutes an area of variable widths adjacent to selected bodies of water (including major streams). The width is variable in order that it may include the needs that arise in the following areas of consideration:

(a) the lake and stream shores
(b) adjoining slopes now occupied or susceptible to occupancy and use
(c) adjacent areas which can be used to draw certain types of occupancy such as campgrounds, away from proximity to the water's edge, and
(d) buffer strips of trees and other vegetation that furnish background or important scenic values.

Use in this zone is generally one of the heaviest in the subregion. The major direction of use is towards recreation, both existing and potential, due to the attractiveness and demand of the areas for fishing, boating, camping, and picnicking. Access roads are usually only fair, and are in need of improvement and expansion. Management in a few areas is complicated by the existence of interspersed privately owned lands.

MANAGEMENT PRIORITY

Water - primary.
Recreation - secondary.

MANAGEMENT OBJECTIVES

1. To give the protection to water needed to preserve its value as water for power, irrigation, domestic use, recreation, fishing, etc., which may be prescribed by law, regulation, permit, or policy.

2. Provide for optimum recreation use.

MANAGEMENT DIRECTION

Recreation

1. Recreation priorities will be assigned to develop the highest form of use commensurate with apparent needs.

2. Conflicting uses must be subordinated or integrated with water resource and recreation use.

3. Planned reservoir development will insure adequate provision for needed recreation facilities. Full development of recreation potential will be planned for on all reservoirs irrespective of constructing agency.

Special Land Uses

1. Commercial development will be considered only to meet established needs and where suitable private land is not available or where private land owners are unable or unwilling to provide adequate facilities.

2. Summer home tracts will not be located on public land within this zone. Existing permits will be terminated on a planned basis.

Range

1. Grazing will be managed or adjusted as necessary to provide for protection of water and recreation uses. Need for water for livestock using adjacent range areas will be given consideration.

Wildlife

1. Special attention to be directed toward improving existing reservoirs or creating new ones for fish life.

2. Wildlife management will be harmonized with recreation and related uses--with special attention being given to a balanced population.

Timber

1. Planning for and cutting timber will be adjusted to meet the needs and objectives of this zone. Special attention will be given to skidding, yarding, slash disposal, and to maintaining attractiveness of forest.

2. Where major roads or highways cross this zone, timber cutting policies will be the same as the Chief's policy for scenic strips.

LAND UTILIZATION AREA

This covers the Land Utilization Project Wyoming-LU-21 in the plains area of the Wyoming Subregion.

The climate of the Land Utilization Project is characterized by low annual precipitation (10-15 inches) with occasional high intensity summer storms. The area is composed of rolling low hills and prairies range lands devoted almost exclusively to grazing of livestock and wildlife.

The purpose of the project is to contribute to the stabilization of the agriculture in the area by correcting serious maladjustments in land use and effecting readjustments which prevent their recurrence. This includes devoting the submarginal lands and lands not suited for cultivated crop production.

MANAGEMENT PRIORITY

Range and wildlife - Primary.

MANAGEMENT OBJECTIVE

1. To restore and maintain a permanent vegetative cover adequate to prevent soil movement and minimize siltation of streams and reservoirs.
2. To correct maladjustment in use of submarginal lands and lands not suited to cultivation.
3. To initiate more effective multiple-use management in the general public interest.

MANAGEMENT DIRECTION

Range

Bring all usable range, as determined by range analysis, to optimum production through sound range management practices and physical improvements.

Wildlife

1. Recognize wildlife as an important use and work closely with permittees, wildlife agencies, and sportsmen to insure accessibility and use by the public.

2. Cooperate with Wildlife managing agencies to provide optimum habitat for fish, game birds, and animals, and in regulating rodent and predatory populations.

Lands

Land-for-land exchanges will be given high priority on this L.U. Project to more fully meet the purposes and intent of the project.

Recreation

Wherever opportunity exists prime consideration will be given to the development of public recreation. Tree planting, fishing ponds, and picnic areas are possibilities.

SPECIAL AREAS

Special areas are exceptions in management because their boundaries are determined by particular considerations of public significance which are not necessarily duplicated from one instance to the next. Classified areas make up the bulk of areas falling in this category. Because of the variety of circumstances which may determine the need for classification, a general description of areas are not attempted. Instead, the kinds of areas most commonly encountered are listed:

Wilderness areas (Including Primitive Areas)
Wild Areas
Geological Areas
Natural Areas
Scenic areas

Additional kinds of classified areas are listed and defined in the National Forest Manual. These areas share the feature that interest in management ordinarily is national rather than subregional. Management direction for individual areas will vary in accordance with management plans specifically designed for the area.

Pole Mountain Military Reservation on the Medicine Bow Forest will be treated as a special area.

MANAGEMENT PRIORITY

To be established individually by areas.

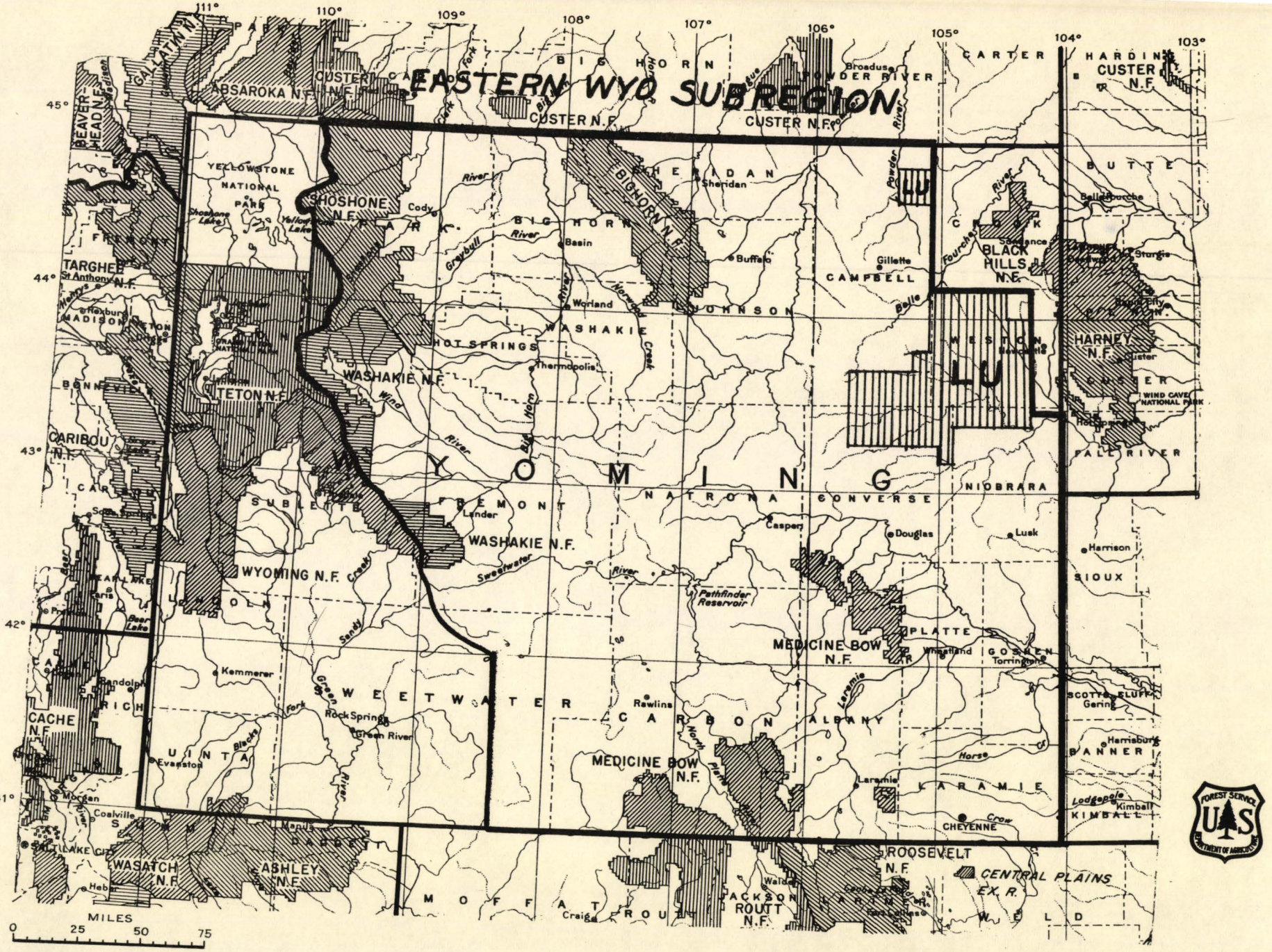
MANAGEMENT OBJECTIVE

To be established individually by areas.

MANAGEMENT DIRECTION

To be established individually by areas.

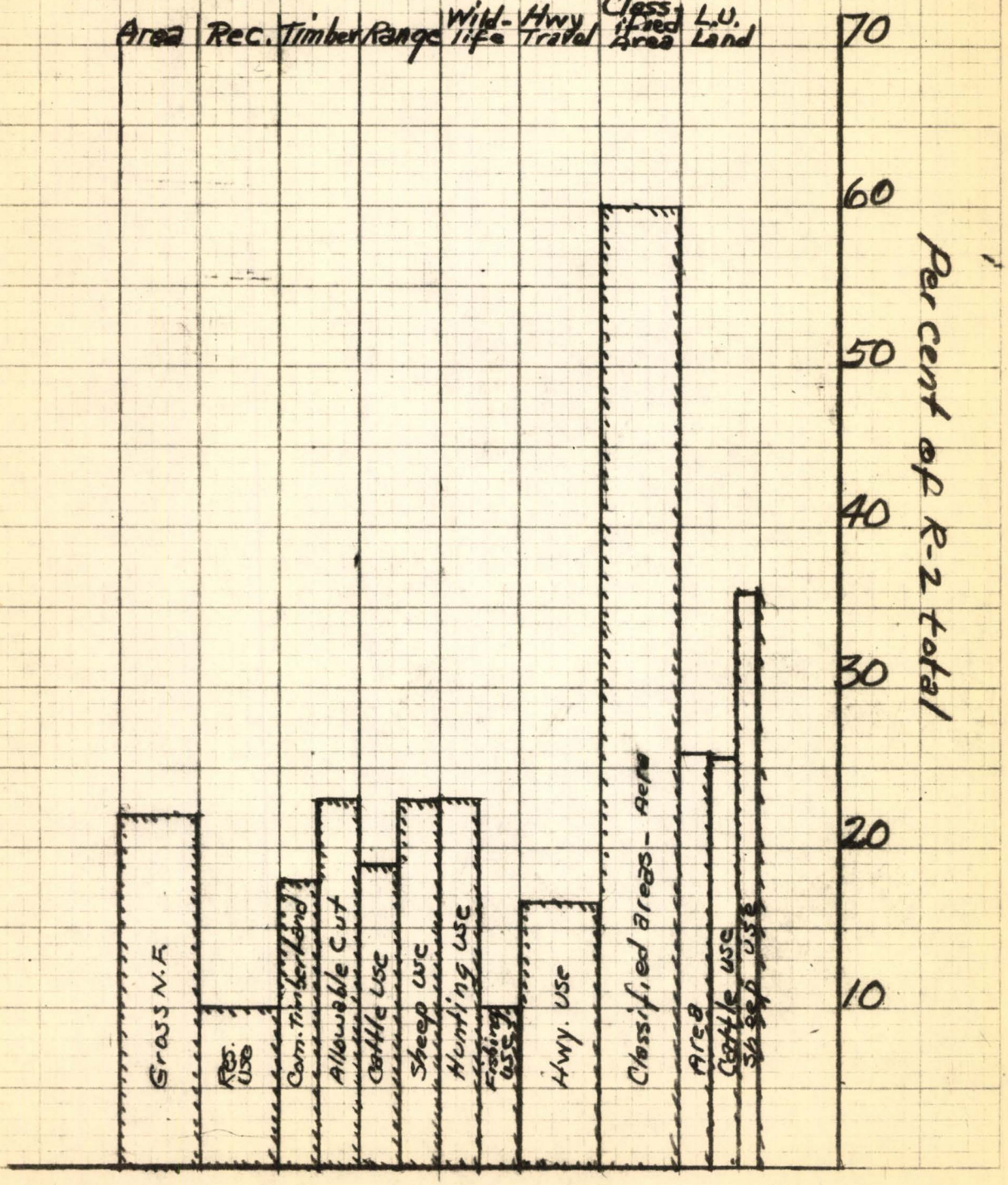
APPENDIX


EASTERN WYO SUBREGION
111°
110°
109°
108°
107°
106°
105°
104°
103°
45°
44°
43°
42°
41°
BEAVERHEAD N.F.
GALLATIN N.F.
ABSAROKA N.F.
CUSTER N.F.
BIG HORN
POWDER RIVER
CARTER
HARDING
CUSTER N.F.
YELLOWSTONE NATIONAL PARK
SHOSHONE N.F.
SHERIDAN
BIGHORN N.F.
BUTTE
FREMONT
TARGHEE
St Anthony N.F.
BIG HORN
CAMPBELL
BLACK HILLS N.F.
JOHNSON
WESTON
HARNEY N.F.
CUSTER
WASHAKIE
HOT SPRINGS
WASHAKIE N.F.
TETON N.F.
BONNEVILLE
MADISON
TETON
CARIBOU N.F.
WIND CAVE NATIONAL PARK
FALL RIVER
WYOMING
SUBLETTE
FREMONT
NATRONA
CONVERSE
NIOBRARA
WASHAKIE N.F.
WYOMING N.F.
LINCOLN
SWEETWATER
PLATTE
GOSHEN
SIOUX
MEDICINE BOW N.F.
CACHE N.F.
RICH
UINTA
CARBON
ALBANY
SCOTTS BLUFF
BANNER
MEDICINE BOW N.F.
SUMMIT
DAGGETT
WASATCH N.F.
ASHLEY N.F.
MOFFAT
ROUTT
JACKSON
ROUTT N.F.
LARAMIE
KIMBALL
CHEYENNE
ROOSEVELT N.F.
CENTRAL PLAINS EXP. R.
WELD
Yellowstone River
Shoshone Lake
Yellowstone Lake
Snake River
Graybull River
Basin
Buffalo
Gillette
Sheridan
Powder River
Broadus
Belle Fourche River
Sundance
Sturgis
Belle Fourche
Rapid City
Hot Springs
Worland
Thermopolis
Wind River
Big Horn River
Norwood Creek
Lander
Casper
Douglas
Lusk
Harrison
Pathfinder Reservoir
Sweetwater River
Kemmerer
Fontenelle Reservoir
Green River
Rock Springs
Rawlins
Green River
Laramie River
Wheatland
Torrington
Gering
Harrisburg
Horse Creek
Lodgepole Creek
Kimball
Laramie
Cheyenne
Crow Creek
North Platte River
Evanston
Coalville
Salt Lake City
Hebar
Craig
Meeker
Walden
Encampment
Saratoga
Fort Collins
Greeley
Sandy
Blacks Fork
Bear Lake
Randolph
Paris
Soda Springs
Montpelier
Afton
Star Valley
Big Piney
Pinedale
Dubois
Cody
Lovell
Powell
Ralston
Alcova
Glendo
Guernsey
Hartville
Lingle
Fort Laramie
Torrington
Chadron
Crawford
Harrison
Hot Springs
Edgemont
Oelrichs
Newcastle
Upton
Sundance
Belle Fourche
Spearfish
Deadwood
Lead
Rapid City
Custer
Hot Springs
Wind Cave National Park
Fall River
Niobrara
Converse
Natrona
Sioux
Scotts Bluff
Gering
Banner
Kimball
Laramie
Albany
Carbon
Sweetwater
Uinta
Lincoln
Sublette
Fremont
Teton
Madison
Bonneville
Caribou
Targhee
Big Horn
Park
Hot Springs
Washakie
Weston
Campbell
Johnson
Sheridan
Carter
Harding
Butte
Custer
Harney
Fall River
Niobrara
Converse
Natrona
Sioux
Platte
Goshen
Albany
Laramie
Carbon
Sweetwater
Uinta
Lincoln
Sublette
Fremont
Teton
Madison
Bonneville
Caribou
Targhee
Big Horn
Park
Hot Springs
Washakie
Weston
Campbell
Johnson
Sheridan
Carter
Harding
Butte
Custer
Harney
Fall River
MILES
0
25
50
75
GPO 832531
BASE FROM U.S.G.S.

Eastern Wyo. Subregion

Management Situation as a % of R-2

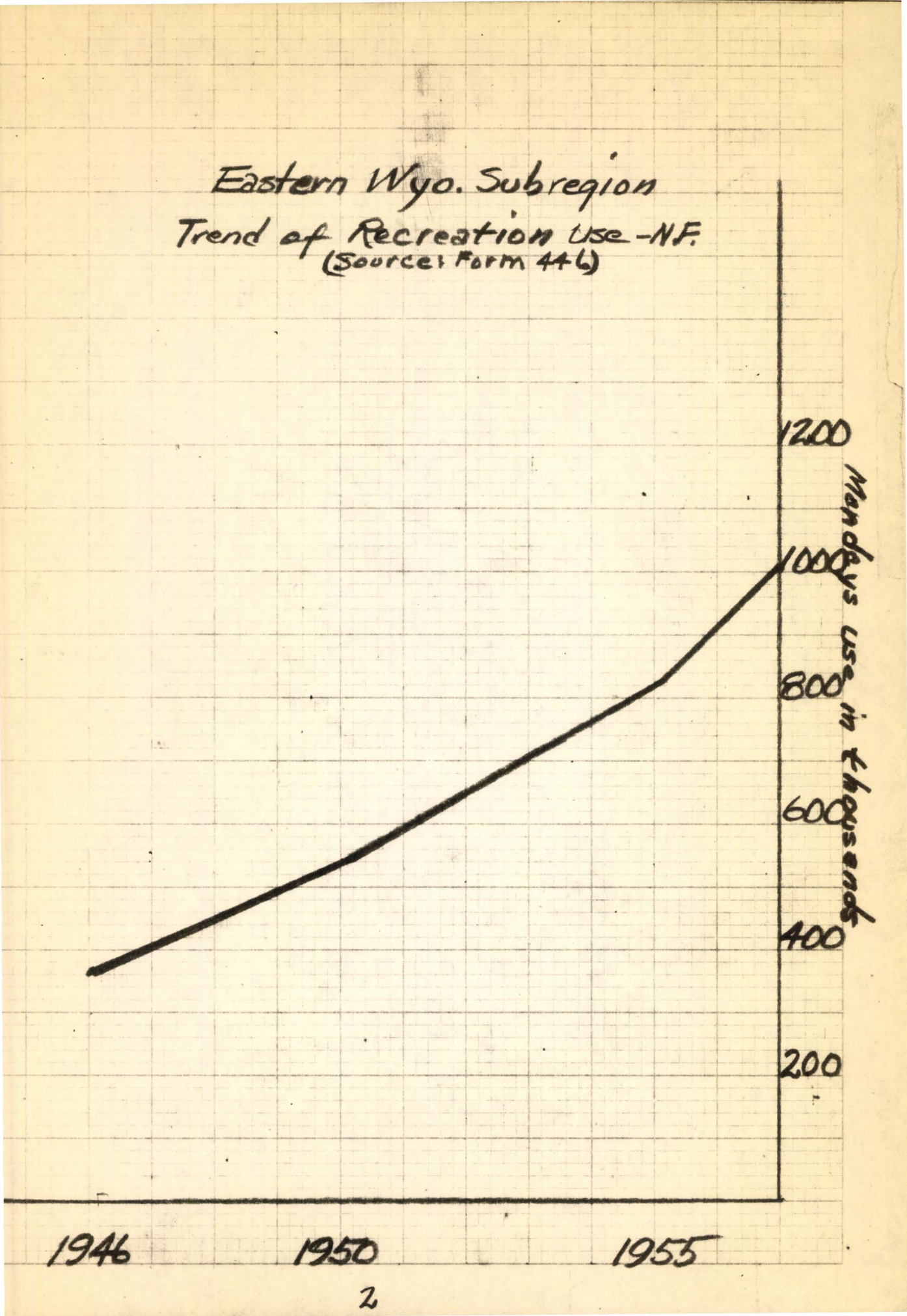
(Source: N.F. statistical reports)



Eastern Wyo. Subregion

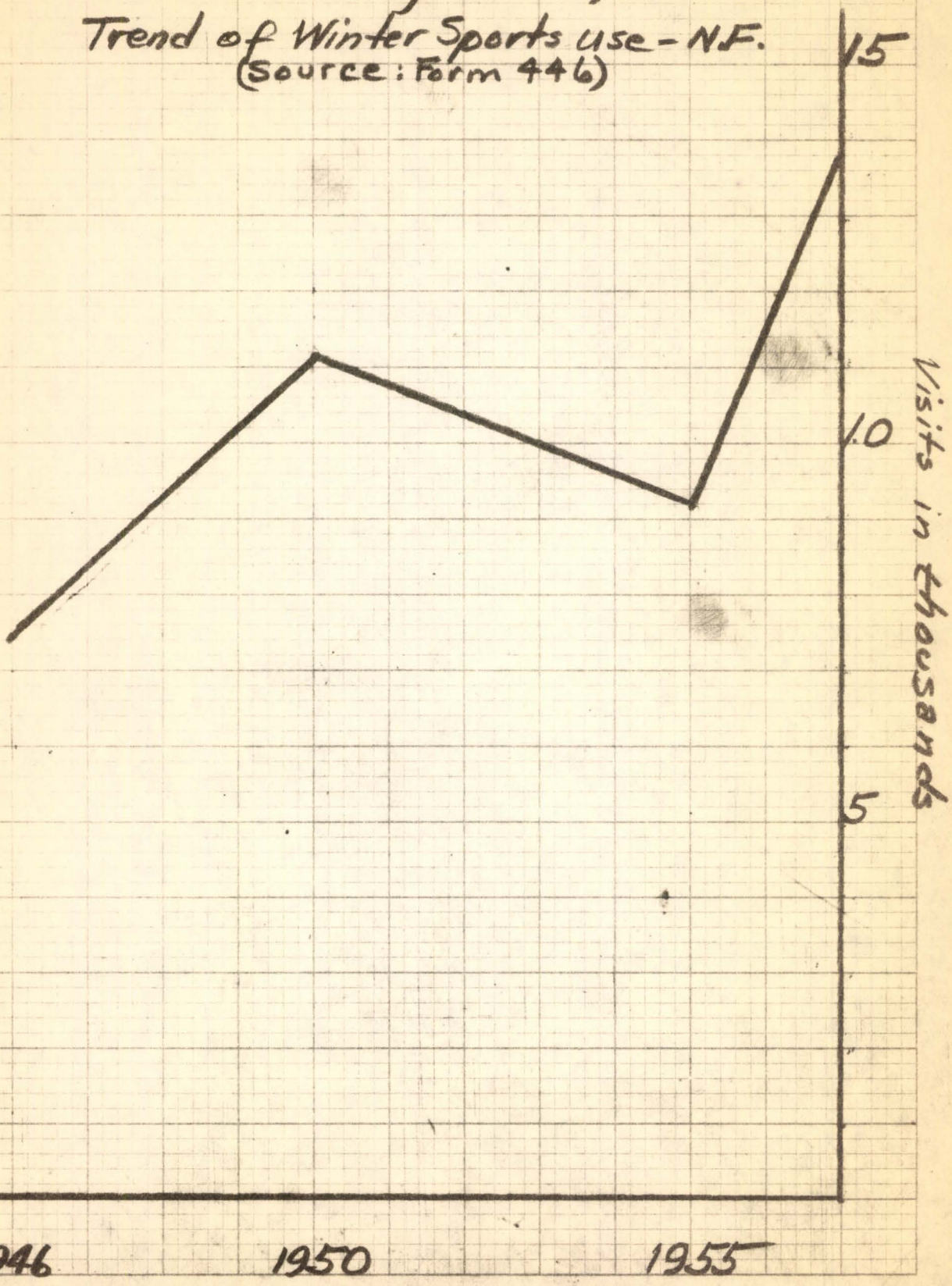
Trend of Recreation Use - N.F.

(Source: Form 446)



Eastern Wyo. Subregion

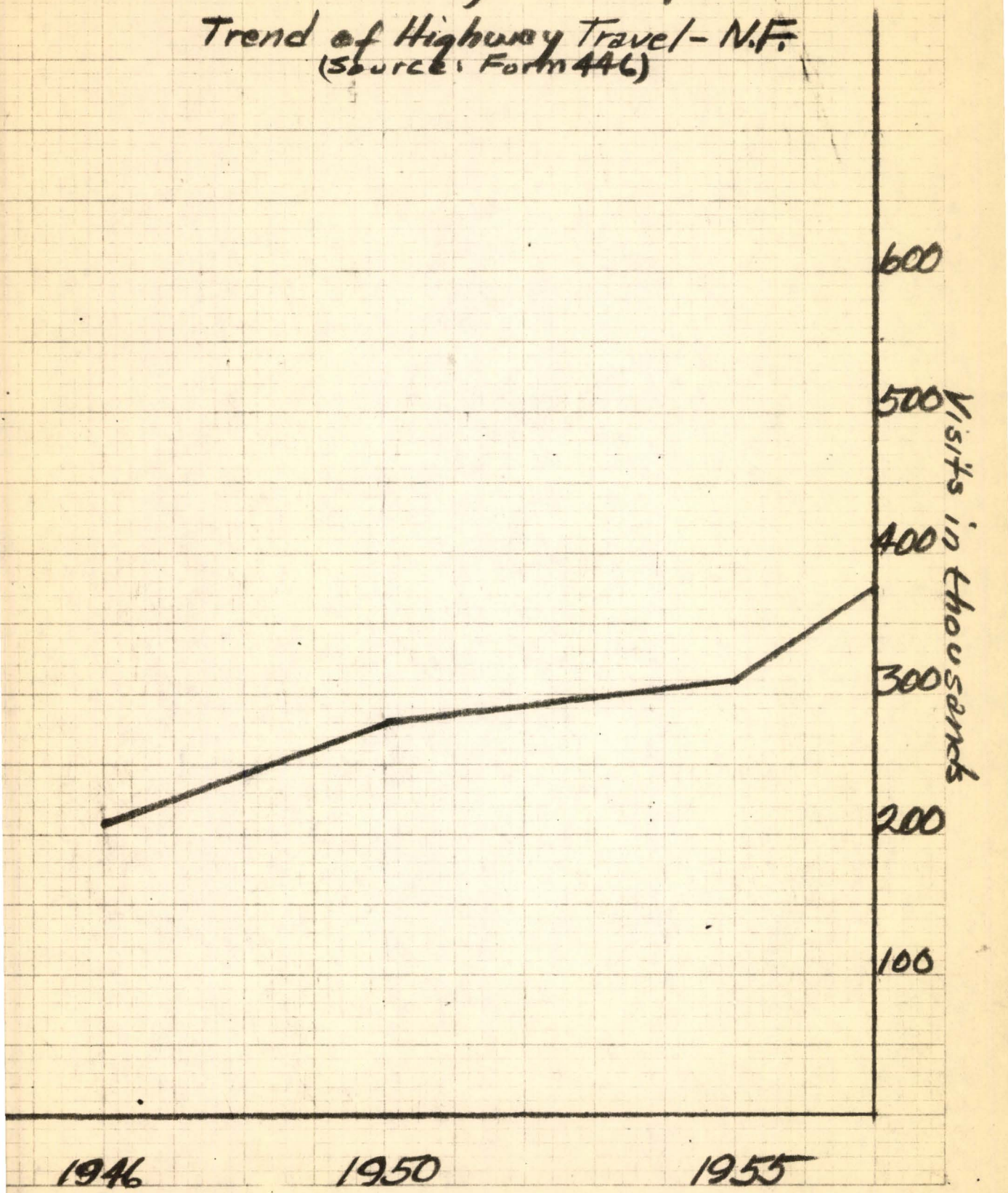
Trend of Winter Sports use - N.F.
(Source: Form 446)



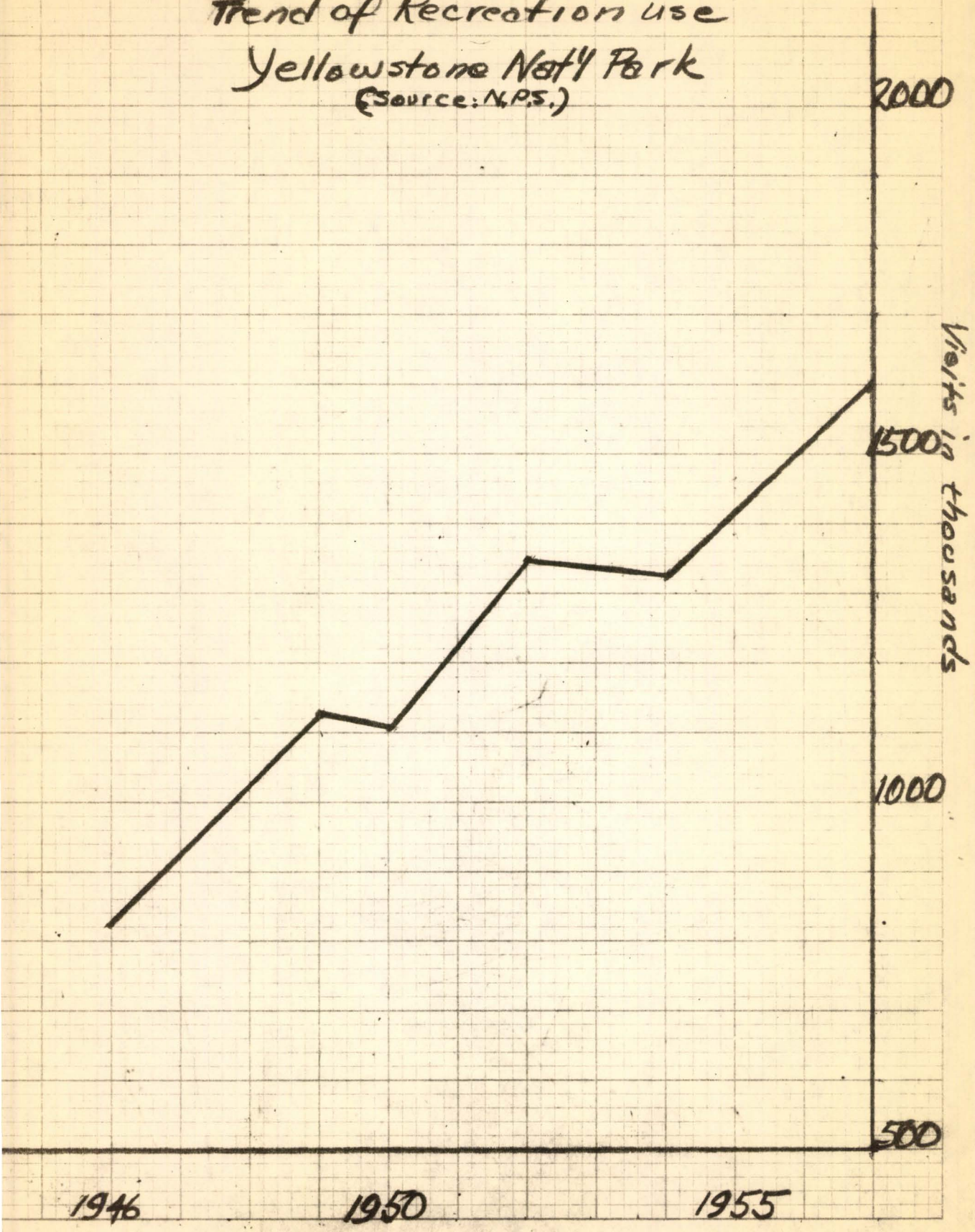
Eastern Wyo. Subregion

Trend of Highway Travel - N.F.

(Source: Form 446)



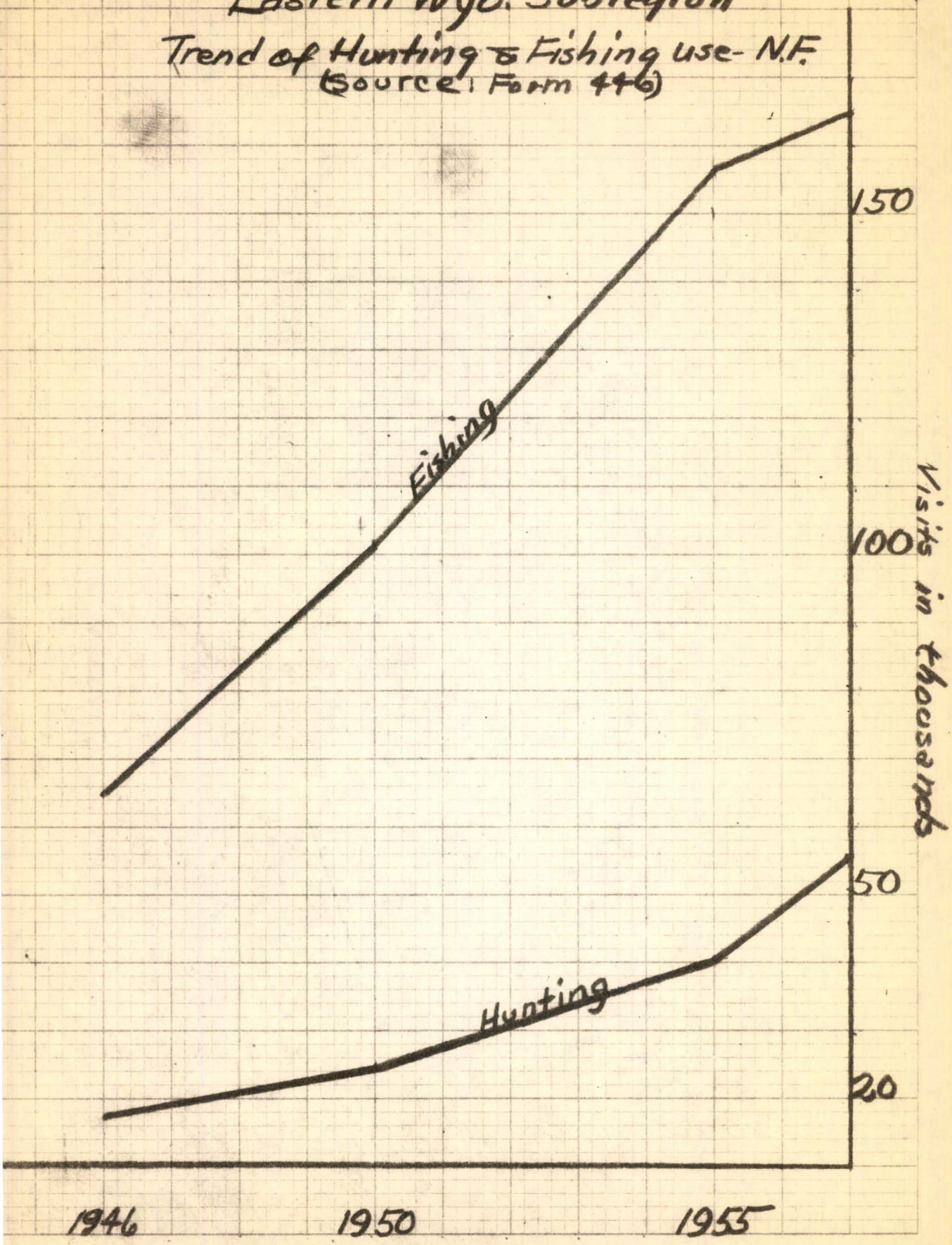
Eastern Wyo. Subregion
Trend of Recreation use
Yellowstone Nat'l Park
(Source: N.P.S.)



Eastern Wyo. Subregion

Trend of Hunting & Fishing use - N.F.

(Source: Form 446)



Eastern Wyo. Subregion

Trend of Grazing use — N.F.

(Source: Form 438)